copy of the amended claims is herewith provided in Attachment "B".

REMARKS

Claims 1-9 are pending in the application and are presented for reconsideration and further examination in view of the foregoing amendments and following remarks.

In the outstanding Office Action claims 1 and 4 were rejected under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 5,659,321 to Burger et al. in view of U.S. Patent No. 6,181,791 to Murphy; and claims 2-3 and 5-9 were rejected under 35 U.S.C. § 103(a) as obvious over the Burger et al. '321 patent in view of the Murphy '791 patent and further in view of U.S. Patent No. 5,574,978 to Talwar et al.

By this Response and Amendment claims 1-9 are amended to remove reference numbers therefrom, to clarify the claims, and to correct noted errors of antecedent basis; and the rejections of claims 1-9 are traversed and arguments in support thereof are provided.

It is respectfully submitted that the above amendments introduce no new matter within the meaning of 35 U.S.C. § 132.

Rejections under 35 U.S.C. § 103

I. The Examiner rejected claims 1 and 4, stating:

> Regarding claim 1 Burger teaches an antenna for emitting a sampled signal into a volume and for picking

up an effective echo signal reflected by a volume (see col. 2, lines 16-20 and Fig. 1). Burger teaches a receiver for evaluating an echo signal supported by an antenna (see col. 3, lines 31-33) and an antenna connected to a coupler (see col. 2, lines 12-14). Burger does not teach a transceiver unit with a transmitter for generating a sampled signal, a signal composed of an echo signal and an unwanted echo signal, a receiver that upon receiving a sample signal supplies an unwanted echo signal in proportion to a correction signal, or a coupler that heterodyne the signals so that the unwanted echo signal is cancelled. Murphy teaches a transceiver unit with a transmitter for generating a sampled signal (see col. 2, lines 40-42). Murphy also teaches a receiver for evaluating an echo signal and a signal composed of a transmit signal and an unwanted echo signal (see col. 2, lines 45-50). Murphy also teaches a receiver that upon receiving a sample signal supplies an unwanted echo signal in proportion to a replica signal and an amplifier that heterodyne the signals so that the unwanted echo signal is cancelled (see col. 2, lines 66-67, col. 3, lines 20-23 and abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Burger adapt to include a transceiver unit with a transmitter for generating a sampled signal, a signal composed of an echo signal and an unwanted echo signal in proportion to a correction signal, and an amplifier that heterodyne the signals so that the unwanted echo signal is canceled because this would allow for an echo signal to be transmitted and received without the presence of undesired interference.

Regarding claim 4 Burger teaches an antenna (see col. 3, lines 30-34) and Murphy teaches a network of resistors (see col. 7, lines 17-18 and Fig. 3).

RESPONSE

Applicant respectfully traverses the rejections.

To establish a *prima facie* case of obviousness, the Examiner must establish: (1) that some suggestion or motivation to modify the references exists; (2) a reasonable expectation of success; and (3) that the prior art references teach or suggest all the claim

limitations. Amgen, Inc. v. Chugai Pharm. Co., 18 USPQ2d 1016, 1023 (Fed. Cir. 1991); In re Fine, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988); In re Wilson, 165 USPQ 494, 496 (C.C.P.A. 1970).

A *prima facie* case of obviousness must also include a showing of the reasons why it would be obvious to modify the references to produce the present invention. See Ex parte Clapp, 277 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). The Examiner bears the initial burden to provide some convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings. Id. at 974.

Applicant respectfully submits that the cited prior art cannot be combined as suggested by the Examiner to arrive at the presently claimed invention for at least the reason that the cited prior art does not teach or suggest all the claim limitations.

Claim 1 has been amended to clarify the invention. In claim 1 the limitation "supplies an unwanted echo signal in proportion to the correction signal" has been amended to --provides a correction signal proportional to the unwanted echo signal--.

Claim 1, as amended, is directed to a wireless measuring device for level measuring that has a transceiver unit, wherein the transceiver unit comprises a transmitter for generating a sampled signal, an acquisition antenna for emitting the sampled signal into an acquisition volume and for picking up an effective echo signal reflected by the acquisition volume, and a receiver for evaluating an echo signal supplied by the acquisition antenna. The echo

signal is composed of the effective echo signal and an unwanted echo signal generated by the acquisition antenna. More particularly, as claimed in claim 1, an antenna simulation is connected by one or more couplers to the transmitter and the receiver. Upon receiving the sampled signal, the antenna simulation provides a correction signal proportional to the unwanted echo signal. The one or more couplers heterodyne the correction signal and the echo signal whereby the correction signal and the unwanted echo signal cancel each other.

As described in the specification at page 5, second and third paragraph, there is one antenna which itself produces noise signals besides the signal which is sent to a reflection surface and then this signal is detected. An antenna simulation, which in one currently preferred embodiment is a second antenna, is provided which is similar to the first antenna. However this antenna simulation sends its signal into an absorber and therefore this sent signal is not relevant. However, due to the fact that this antenna simulation is similar to the first antenna the antenna simulation provides similar noise signals as the first antenna. If the noise signal of the antenna simulation is subtracted from the noise signal of the first antenna then the final signal is only the real echo signal.

The Burger patent discloses a well known level measuring system. Burger does not disclose reducing the disturbing antenna reflections by providing a correction signal and superposing the

correction signal to cancel the unwanted noise signal.

As acknowledged by the Examiner, the Burger patent does not teach a transceiver unit with a transmitter for generating a sampled signal, a signal composed of an echo signal and an unwanted echo signal, a receiver that upon receiving a sample signal supplies an unwanted echo signal in proportion to a correction signal, or a coupler that heterodyne the signals so that the unwanted echo signal is cancelled.

The cited Murphy '791 patent discloses a wire-line telephone communication system that operates over a twisted pair telephone line (col. 2, lines 37-39) in which unwanted signals can be avoided (col. 4, line 46-49). Such unwanted signal can arise due mismatching of a modem for example which is connected to a personal computer (PC) (see Figs. 1-2, 4). When the PC sends signals over the twisted pair telephone line a problem arises in that a part of the transmitted signal can be reflected (see col. 4, lines 64-67). To avoid this problem Murphy suggests feeding a part of the transmitted signal into a difference amplifier (14, 114). The Murphy patent discloses at col. 6, lines 34-48, that the power cancellation of the unwanted transmit signal forming the local echo can be improved with a voltage scalar that provides an exact amplitude replica of the transmit signal forming the local echo. As shown in FIG. 2 of the Murphy patent, the voltage scalar 112 is responsive to a scale control signal as generated by echo reducing means in the form of an encoder 140, which generates the scale

control signal to the voltage scalar 112 based upon the received signal power from the analog-to-digital converter 134, thereby reducing echo. As further disclosed in the Murphy patent, the apparatus is part of a personal computer 122, communicating via modem with Telco 116.

In the Murphy patent's difference amplifier a scaled correcting signal is subtracted from the receiving signal and a disturbing echo can thus be eliminated (see column 2, lines 66-67). The scaled correcting signal is done by a fixed or an adjustable voltage divider (see Fig. 3) or with an A/D stage (see Fig.4). Furthermore, the correcting signal can be calculated (see column 8, lines 7-28).

Although Murphy discloses the avoidance of an unwanted signal by superimposing a correction signal, there are essential differences in relation to the presently claimed invention.

As previously noted, the Murphy patent involves twisted-pair wire-line telephone communication systems. Applicants respectfully submit that cancellation of an unwanted reflected noise signal in a wire-line communication system is not analogous to cancellation of reflected noise in a wireless measuring device for level measuring, as claimed in claim 1.

Even assuming arguendo that the Murphy patent were to be deemed analogous art, the combination of the Murphy patent with the Burger patent would not result in the invention as claimed in claim 1 because the Murphy patent always produces its correcting signal

by providing a difference within a difference amplifier (14, 114).

In the present invention, as claimed in claim 1, the correcting signal is provided by an antenna simulation. Murphy does not disclose an antenna simulation, as claimed in claim 1. Furthermore Murphy does not disclose a coupler as also claimed in claim 1.

Therefore it is submitted that claim 1 is patentable over the cited prior art.

Claim 4 has been amended to clarify the invention by replacing the symbol "Z" which is conventionally understood to represent a complex impedance (see e.g., Electronics Engineer's Handbook, 3rd ed., 1989) with its corresponding express language --complex impedances--.

Claim 4, dependent from claim 1, is asserted to be patentable over the cited prior art for at least the same reasons that claim 1 is patentable thereover.

Claim 4 is directed to the wireless measuring device for level measuring having a transceiver unit as defined in claim 1 wherein the antenna simulation is a network of complex impedances.

As described in the specification at page 7, a preferred embodiment of which is shown in Fig. 3, the antenna simulation is realized in the form of a network of a plurality of elements with complex resistors that are used to balance the network with the antenna. This enables the antenna to adjust the amplitude of each

individual contribution of the correction signal supplied by the antenna simulation to the echo signal. Applicant respectfully submits that it is only by using complex impedances that the complicated reflection behavior of a antenna can be simulated.

In contrast, the cited Murphy '791 patent discloses a ladder of tuning resistors which is adjusted by transistor switches 154 whereby the resistance value is adjusted so that an applied voltage is scaled. (See col. 7, lines 17-21).

The cited Murphy patent does not disclose complex impedances. To the contrary, and assuming arguendo that Murphy discloses that which the Examiner purports, the most that Murphy discloses is an ohmic resistance network without any complex component.

In the presently claimed invention an antenna simulation not only includes real resistors (as used by Murphy), but also includes complex impedance resistors (as claimed in claim 4). In this regard it is further noted that the Murphy patent at col. 8, lines 47-48, specifically teaches away from the instant invention. Murphy there discloses that "[w]ithout this invention, the design would require complex analog filtering". Thus, it is submitted that the Examiner's purported combination of the Burger and Murphy patents can not result in the complex impedance network as claimed in claim 4. Therefore, claim 4 is also asserted to be patentable over the cited prior art for this additional reason.

Accordingly, reconsideration and withdrawal of the rejections is respectfully requested.

II. The Examiner rejected claims 2-3, and 5-9, stating:

Regarding claim 2 Burger and Murphy teach a device as recited in claim 1 except a second antenna that emits into an absorber. Talwar teaches a second antenna that emits signals (see col. 1, lines 21-23) and Burger teaches an antenna that emits a signal into an absorber (see col. 4, lines 43-47). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Burger and Murphy adapt to include a second antenna that emits into an absorber because this would allow for a signal to be transmitted without having reflective properties.

regarding claims 3 Talwar teaches two antennae of similar design (see col. 1 lines 21-23 and Fig. 1).

Regarding claim 5 Talwar teaches a power splitter for distributing sampled signals with equal power to an antenna (see col. 9, lines 55-60 and Fig. 3).

Regarding claim 6 Burger, Murphy, and Talwar teach a device as recited in claim 3 except for a power splitter for distributing power to an acquisition antenna and a simulation antenna, a power splitter for feeding power from a sampled signal to an antenna simulation and an acquisition antenna, and one antenna with a different reflectivity from another. Talwar teaches two antennae that emit signals (see col. 1, lines 21-23) and a power splitter for distributing and feeding power from a sampled signal to an antenna (see col. 11, lines 36-44). Burger teaches degrees of reflectivity (see col. 1, lines 34-35) and a reflective antenna (see col. 2, lines 19-20). It would have been obvious to make the Burger, Murphy and Talwar adapt to include a power splitter for distributing power to an acquisition antenna and a simulation antenna, a power splitter for feeding power from a sampled signal to an acquisition antenna and antenna simulation, and one antenna with different reflectivity from another because this would allow sampled signals to be sent to an antenna with equal reflective properties.

Regarding claim 7 Burger and Murphy teach a device as recited in claim 1 except for a correction signal as 180° phase quadrature to an unwanted echo signal. Talwar teaches a reference signal as a phase quadrature of an unwanted echo signal (see col. 8, lines 2-13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Burger and Murphy adapt to include a correction signal as 180° phase quadrature to an unwanted echo signal because this would allow for an undesired signal to be completely cancelled

by another.

Regarding claim 8 Talwar teaches an echo signal that is a radio signal (see abstract) and Burger teaches a mixer between an antenna and a coupler for converting an echo signal to an intermediate frequency (see col. 2, lines 6-14 and col. 5, lines 3-12).

Regarding claim 9 Burger teaches a waveguide system and four connections ports (see col. 6, lines 11-14 and Fig. 2). Burger also teaches a transmitter and a receiver jointly connected to an antenna (see col. 2, lines 15-20 and Fig. 1) and lengths of wave sections, which have a frequency that is some multiple of the wavelength of a sampled signal (see col. 2, lines 45-47).

Talwar teaches adjacent antennae (see col. 1, lines 20-23 and FIG. 1).

RESPONSE

Applicants respectfully traverse the rejections.

Applicants incorporate herein by reference the arguments presented above in response to the rejection of claim 1 and respectfully submit that since claim 1 is patentable over the cited prior art, claims 2-3 and 5-9, each ultimately dependent from claim 1, are likewise patentable thereover.

With respect to claim 2, Applicants further respectfully submit that contrary to the Examiner's assertion, the Burger et al. patent nowhere discloses that the antenna emits into an absorber. The passage relied upon by the Examiner (col. 4, lines 43-47) merely states: "[t]he object whose distance S from this antenna 7 is to be measured, is represented symbolically opposite the horn aperture and identified by 8. In a level measuring device the surface of the object 8 is formed by the surface of the material in

the container (FIG. 1)". The cited passage nowhere discloses that the antenna emits into an absorber, as claimed in claim 2. Moreover, as disclosed in the Burger patent at col. 3, lines 30-33, in its discussion of the Fig. 1 recited in the relied upon passage, "[f]or measuring the level H an antenna 14 is mounted above the container 10, which antenna is able to transmit an electromagnetic wave toward the surface of the material 12 **and to receive the echo wave due to reflection at the surface**". Applicant respectfully submits that contrary to the Examiner's assertion, the material 12 recited in the passage relied upon by the Examiner is NOT an absorber because an absorber would not produce an echo wave due to reflection at the surface. Therefore claim 2 is also asserted to be patentable over the cited prior art for this additional reason.

With respect to claim 3, Applicants further incorporate herein by reference the arguments presented above in response to the rejection of claim 2, from which claim 3 depends, and respectfully submit that since claim 2 is patentable over the cited prior art, claim 3 is likewise patentable thereover.

Moreover, Applicants further submit that contrary to the Examiner's assertion, the Talwar et al. patent nowhere discloses that the first and second antennae are similar in design as claimed in claim 3. The passage relied upon by the Examiner (col. 1, lines 21-23) merely states "Each of radio 1 and radio 2 is connected to

its own antenna 6,8 for transmitting and receiving signals, each antenna 6,8 being shown connected to its respective radio by a transmission line 10, 12". The cited passage nowhere discloses that the disclosed antennae 6, 8 are similar in design, as claimed in claim 3. Therefore claim 3 is also asserted to be patentable over the cited prior art for this additional reason.

With respect to claim 5, Applicants respectfully submit that contrary to the Examiner's assertion, the Talwar et al. patent nowhere discloses that the power splitter distributes power equally between the first and second antennae as claimed in claim 5. The passage relied upon by the Examiner (col. 9, lines 55-60) merely states "...the common antenna 68 is coupled to the input of a three-way power splitter 70. The first and second transmitting radios 60,62 are respectively coupled to two outputs of the power splitter 70 by respective transmission lines 72,74, and the first and second receiving radios 64,66 are also coupled to a third output of the power splitter 70 with a transmission line 76". The cited passage nowhere discloses that the power splitter distributes power equally between the first and second antennae as claimed in claim 5. Therefore claim 5 is also asserted to be patentable over the cited prior art for this additional reason.

With respect to the rejection of claim 6, Applicants do not understand the relevance of the Examiner's statement that Burger,

Murphy and Talwar teach a device "as recited in claim 3" since claim 6 is not dependent on claim 3.

Notwithstanding the above, Applicants further incorporate herein by reference the arguments presented above in response to the rejection of claim 2, from which claim 6 depends, and respectfully submit that since claim 2 is patentable over the cited prior art, claim 6 is likewise patentable thereover.

Moreover, as noted above in response to the rejection of claim 5, the Talwar patent nowhere discloses that the power splitter distributes power equally between the first and second antennae as claimed in claim 5; and similarly Talwar et al. nowhere discloses that the power splitter distributes a smaller part of the power of the sampled signal to the antenna simulation than to the acquisition antenna as claimed in claim 6. Therefore claim 6 is also asserted to be patentable over the cited prior art for this additional reason.

With respect to claim 8, Applicants respectfully submit that contrary to the Examiner's assertion, the Burger et al. patent nowhere discloses that between the acquisition antenna and the coupler or between the antenna simulation and the coupler, respectively, a mixer is placed as claimed in claim 8. To the contrary, the passage relied upon by the Examiner (col. 2, lines 6-14 (see also Fig. 1)) states that "[t]he beam splitter has an input connected to the output of the generator, and two outputs. The

mixer is provided with an output and two inputs of which the first is connected to one of the outputs of the beam splitter and the second to one of the three ports of the coupler. The other output of the beam splitter is connected to a further port of the coupler. The third port of the coupler forms an antenna port to which a duplexer antenna may be connected...".

As shown in the Burger et al. patent at Fig. 1, and as described in the above recited passage, the **coupler is disposed between the mixer and the antenna**. The cited passage nowhere discloses that the **mixer is between the antenna and the coupler** as claimed in claim 8. Therefore claim 8 is also asserted to be patentable over the cited prior art for this additional reason.

With respect to claim 9, Applicants respectfully submit that contrary to the Examiner's assertion, the Burger et al. and Talwar et al. patents nowhere disclose that the coupler comprises a waveguide ring with four connections, which respectively are connected through corresponding waveguide sections; that the acquisition antenna and the antenna simulation are connected to adjacent ones of the connections, and that the transmitter and receiver jointly are connected to another of the connections adjacent to the connection of the acquisition antenna or the antenna simulation as claimed in claim 9.

To the contrary, the passages relied upon by the Examiner

(Burger et al. col. 6, lines 11-14 and Fig. 2) states that "When a waveguide system is used with a horn antenna the high-pass filter 6 of the frequency converter circuit 2 is superfluous since a waveguide system is of high-pass character".

As shown in the Burger et al. patent at Fig. 2, and as described in the above recited passage, when a waveguide system is used the horn antenna is superfluous. As shown in Fig. 2 frequency converter 2 has 3 connection, "B", "C", and a connection to the local oscillator 5. Not four connections as claimed in claim 9. Moreover, the Talwar et al. patent nowhere discloses that the first and second antennae are connected to adjacent ones of the connections, and that the transmitter and receiver jointly are connected to another of the connections adjacent to the connection of the first and second antennae as claimed in claim 9. Therefore claim 9 is also asserted to be patentable over the cited prior art for this additional reason.

Accordingly, reconsideration and withdrawal of the rejections is respectfully requested.

CONCLUSION

In light of the foregoing, Applicant submits that the application is in condition for allowance. If the Examiner believes the application is not in condition for allowance, Applicant respectfully requests that the Examiner contact the

undersigned attorney if it is believed that such contact will expedite the prosecution of the application.

Respectfully submitted,

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Date: December 4, 2002

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Attachment "A"
(Marked-Up Copy of Amended Claim)

1. (Amended) A wireless measuring device for level measuring having a [T]transceiver unit comprising:

a transmitter [(1)] for generating a sampled signal,

an acquisition antenna [(5)] for emitting the sampled signal into an acquisition volume [(8)] and for picking up an effective echo signal reflected by the acquisition volume [(8)], [as well as] and

a receiver [(2)] for evaluating an echo signal supplied by the acquisition antenna [(5)], said echo signal being composed of the effective echo signal and an unwanted echo signal generated by the acquisition antenna [(5)],

characterized in that:

an antenna simulation [(6)] is connected via one or more couplers [(3, 4, 15, 19)] to the transmitter [(1)] and the receiver [(2)], which, upon receiving the sampled signal, [supplies an] provides a correction signal proportional to the unwanted echo signal [in proportion to the correction signal], and [in that]

the [coupler or] one or more couplers [(3, 4, 15, 19) so] heterodyne the correction signal and the echo signal [that] whereby the correction signal and the unwanted echo signal [delete] cancel each other.

2. (Amended) A wireless measuring device for level measuring having a [T]transceiver unit, as defined in claim 1, wherein the antenna simulation [(6)] is a second antenna and is so placed that said second antenna emits into an absorber [(11)].

3. (Amended) A wireless measuring device for level measuring having a [T]transceiver [device] unit, as defined in claim 2, wherein the antenna simulation [(6)] is similar in design to the acquisition antenna [(5)].

4. (Amended) A wireless measuring device for level measuring having a [T]transceiver unit, as defined in claim 1, wherein the antenna simulation [(6)] is a [Z] network of complex impedances.

5. (Twice Amended) A wireless measuring device for level measuring having a [T]transceiver unit, as defined in claim 1, wherein said transceiver unit comprises a power splitter [(4)] [for distributing] that distributes the sampled signals with respective equal power to the acquisition antenna [(5)] and the antenna simulation [(6)].

6. (Twice Amended) A wireless measuring device for level measuring having a [T]transceiver unit, as defined in Claim 2, wherein said transceiver unit comprises a power splitter [(4)] for distributing the sampled signal to the acquisition

antenna [(5)] and the antenna simulation [(6)], and which feeds a smaller part of the power of the sampled signal to the antenna simulation [(6) then] than to the acquisition antenna [(5)], and [in which]

the antenna simulation [(6)] has a higher reflectivity than the acquisition antenna [(5)].

7. (Twice Amended) A wireless measuring device for level measuring having a [T]transceiver unit, as defined in claim 1, wherein said transceiver unit supplies the correction signal as a 180° phase quadrature to the unwanted echo signal.

8. (Twice Amended) A wireless measuring device for level measuring having a [T]transceiver unit, as defined in claim 1, wherein the echo signal is a radio signal and wherein between the acquisition antenna [(5)] and the coupler [(15)] or between the antenna simulation [(6)] and the coupler [(15)], respectively, a mixer [(13a, 13b)] is placed for converting the echo signal or correction signal on an intermediate frequency.

9. (Amended) A wireless measuring device for level measuring having a [T]transceiver unit, as defined in claim 1, wherein the coupler [(3)] comprises a waveguide ring with four connections [(16a, 16b, 16c, 16d)], which respectively are connected through corresponding waveguide sections [(17a, 17b, 18a, 18d)] the

lengths of which respectively correspond to one-quarter of the wavelength of the sampled signal,

characterized in that:

the acquisition antenna [(5)] and the antenna simulation [(6)] are connected to [the] adjacent ones of said connections [(16b, 16c)], and [in that]

the transmitter [(1)] and receiver [(2)] jointly are connected to another of said connections adjacent to the connection [(16b, 16c)] of the acquisition antenna [(5)] or the antenna simulation [(6) of the adjacent connection (16a)].

Attachment "B"
(Clean Copy of Amended Claims)

B)

1. (Amended) A wireless measuring device for level measuring having a transceiver unit comprising:

a transmitter for generating a sampled signal,

an acquisition antenna for emitting the sampled signal into an acquisition volume and for picking up an effective echo signal reflected by the acquisition volume, and

a receiver for evaluating an echo signal supplied by the acquisition antenna, said echo signal being composed of the effective echo signal and an unwanted echo signal generated by the acquisition antenna,

characterized in that:

an antenna simulation is connected via one or more couplers to the transmitter and the receiver, which, upon receiving the sampled signal, provides a correction signal proportional to the unwanted echo signal, and

the one or more couplers heterodyne the correction signal and the echo signal whereby the correction signal and the unwanted echo signal cancel each other.

2. (Amended) A wireless measuring device for level measuring having a transceiver unit, as defined in claim 1, wherein the antenna simulation is a second antenna and is so placed that said

second antenna emits into an absorber.

B1 (cancel)

3. (Amended) A wireless measuring device for level measuring having a transceiver unit, as defined in claim 2, wherein the antenna simulation is similar in design to the acquisition antenna.

4. (Amended) A wireless measuring device for level measuring having a transceiver unit, as defined in claim 1, wherein the antenna simulation is a network of complex impedances.

B2

5. (Twice Amended) A wireless measuring device for level measuring having a transceiver unit, as defined in claim 1, wherein said transceiver unit comprises a power splitter that distributes the sampled signals with respective equal power to the acquisition antenna and the antenna simulation.

6. (Twice Amended) A wireless measuring device for level measuring having a transceiver unit, as defined in Claim 2,

wherein said transceiver unit comprises a power splitter for distributing the sampled signal to the acquisition antenna and the antenna simulation, and which feeds a smaller part of the power of the sampled signal to the antenna simulation than to the acquisition antenna, and

the antenna simulation has a higher reflectivity than the

acquisition antenna.

7. (Twice Amended) A wireless measuring device for level measuring having a transceiver unit, as defined in claim 1, wherein said transceiver unit supplies the correction signal as a 180° phase quadrature to the unwanted echo signal.

B2 cont'd

8. (Twice Amended) A wireless measuring device for level measuring having a transceiver unit, as defined in claim 1, wherein the echo signal is a radio signal and wherein between the acquisition antenna and the coupler or between the antenna simulation and the coupler, respectively, a mixer is placed for converting the echo signal or correction signal on an intermediate frequency.

B3

9. (Amended) A wireless measuring device for level measuring having a transceiver unit, as defined in claim 1, wherein the coupler comprises a waveguide ring with four connections, which respectively are connected through corresponding waveguide sections the lengths of which respectively correspond to one-quarter of the wavelength of the sampled signal,

characterized in that:

the acquisition antenna and the antenna simulation are connected to adjacent ones of said connections, and

the transmitter and receiver jointly are connected to

B3 cont'd another of said connections adjacent to the connection of the acquisition antenna or the antenna simulation.